

PETERS CAVE: TWO WOODLAND OCCUPATIONS IN ROSS COUNTY, OHIO¹

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ABSTRACT

Two adjacent rockshelters in Peters Cave, Ross County, Ohio, were excavated by the authors in 1964. This constitutes one of the few systematic shelter excavations in Ohio in recent years. Shelter *A* yielded a single-component, undisturbed Adena occupation tentatively dated to 50 B.C. Shelter *B* produced a single-component, undisturbed occupation of Late Woodland affiliation, tentatively dated to 800 A.D. Since little is known of Late Woodland in Ohio, a new cultural phase of the *Scioto Tradition*, named *Peters Phase*, has been defined from the material in Shelter *B*. The cultural assemblage here shows continuity from preceding Woodland phases. The *Peters Phase* clearly post-dates Hopewell and pre-dates the Mississippian Fort Ancient Aspect. The two shelters served as temporary hunting camps, probably occupied only during summer. The vertebrate and invertebrate fauna found in association with the occupation permits detailed discussion and interpretation of hunting practices and food preferences.

The field work on which this report is based was carried out in July and August, 1964, by the authors, with the help of a team of seven students from Case Institute of Technology and Western Reserve University. This work was part of a project sponsored by the National Science Foundation (Grant GS-8), which concentrated on the investigation of Hopewellian and related problems in Ohio.

We wish to express our gratitude to all participants in the expedition as well as to numerous local individuals who aided us in our field work. Among these, our special thanks are due to Mr. Robert Riddle of Londonderry, Ohio, who drew our attention to the archaeological potential of Peters Cave. We are also indebted to Dr. Paul W. Parmalee of the Illinois State Museum, who undertook the faunal analysis, and to Dr. David H. Stansbery of the Ohio State Museum, who identified the molluscs.

THE SITE

Peters Cave is located in Jefferson Township, Ross County, Ohio. The entire shelter system occurs along and adjacent to the line separating sections 12 and 13; the two shelters excavated and reported here are in Section 13. This area is located in the Wayne National Forest, in the extreme southeastern corner of Ross County. The coordinates are 39°11' North Latitude and 82°48' West Longitude (figs. 1 and 2).

The Peters Cave shelter system consists of a series of overhangs formed by water action in a cliff of the Sharon Conglomerate which forms part of the Lower Pennsylvanian (Stout, 1944: 82). These and other shelters in the region appear to have had their genesis in the Pleistocene.

The topography of Ross County is highly varied. In the area under consideration, the Scioto River and its tributaries cut through a dissected hilly landscape which is part of the Appalachian Plateau. The highest elevation in the immediate vicinity of the shelters is approximately 1120 ft. The shelters themselves are located at an elevation of 940 ft. Approximately 2½ miles west-northwest is the junction of the Scioto River and Salt Creek in the broad, alluviated valley of the Scioto. At their junction, the elevation is 570 ft. The hilly terrain rises sharply out of the valley immediately to the southeast of the confluence. The contemporary vegetation in the hills is dense, consisting largely of oak, maple, and elm, with a heavy underbrush of smaller trees and bushes, as well as numerous creepers and vines. Poison Ivy proliferates throughout the area.

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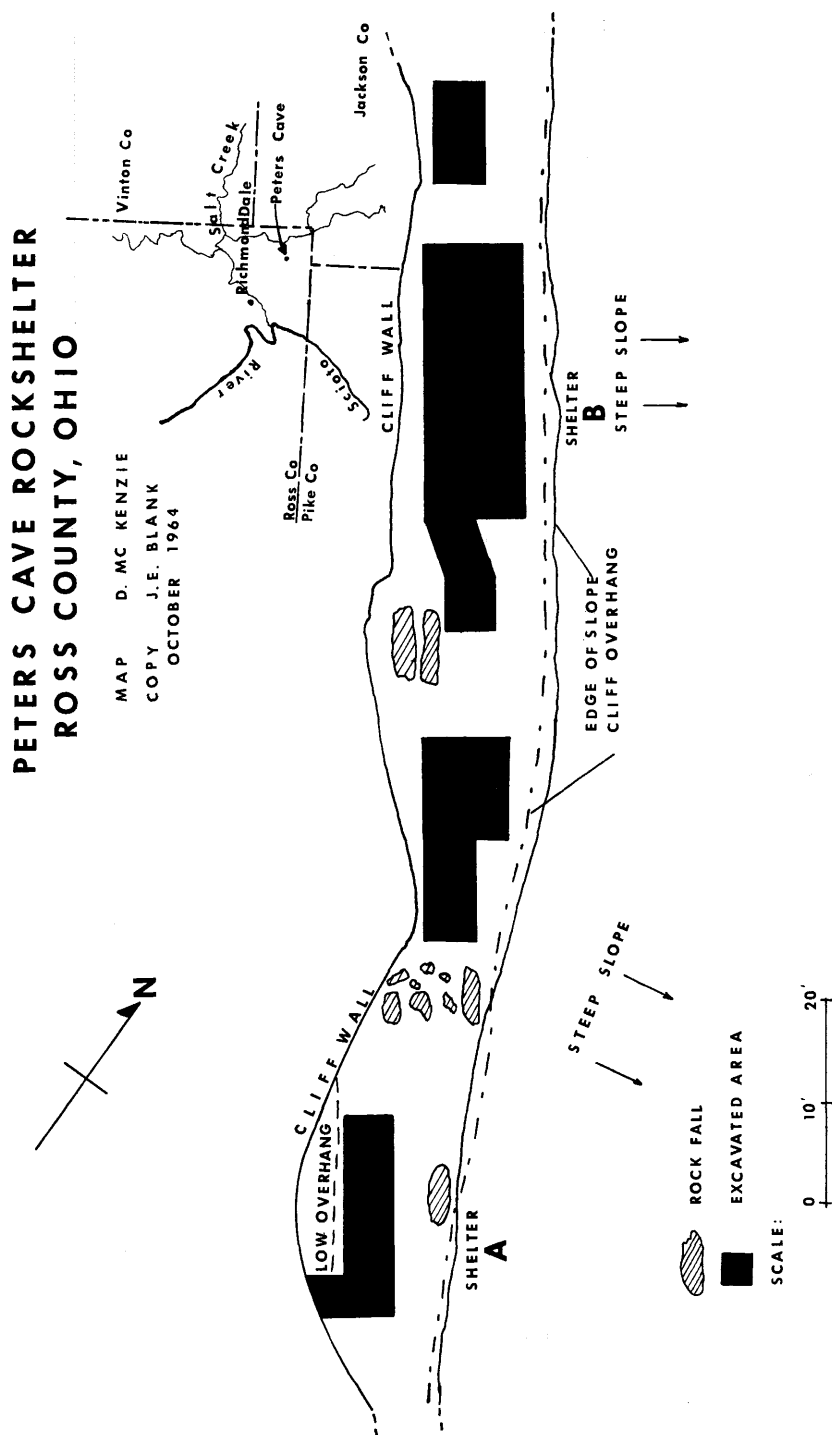


FIGURE 1. Plan of Peters Cave, Shelters A and B, and insert map of site location.

In nearly all of the numerous shelters of the Peters Cave system, some traces of prehistoric occupation were noted. Only two of the overhangs, however, warranted excavation. These are adjacent to each other, but separated by a large rockfall. They face northeast, overlooking a small ravine with steep slopes. Springs abound in the entire shelter system, and a stream, currently intermittent, flows at the bottom of the ravine. Streams in this and other ravines flow, east of Peters Cave, into Little Salt Creek, which enters Salt Creek proper about four miles northeast of the Scioto-Salt Creek confluence.

Local lore states that, some 50 years ago, the current forest area surrounding Peters Cave had been under precarious cultivation. The shelters themselves were used by picnickers from the nearby town of Richmondale. There are many historic rock inscriptions all along the cliff wall; the earliest of these date as far



FIGURE 2. View of Peters Cave from Shelter A looking west.

back as the 1850's. None of the dated inscriptions are younger than the World War I period. Curiously, the deposits in the excavated shelters yielded little evidence of these recent activities, a single gin bottle and a number of .22 caliber shells being the only representatives of the more recent time. Local informants also reported that, in the days when the slopes beneath the shelters were under cultivation, numerous artifacts were found in the fields and garden plots on the steeper slopes. Current vegetation did not permit verification of this statement.

The two excavated shelters were named Shelters A and B. The former was somewhat smaller than the latter, being about 40 ft long and no more than 15 ft wide. Shelter B, separated by the rockfall from Shelter A, was approximately 55 ft long and up to 20 ft wide. The overhang of the cliff coincided with the drop of the shelter floor into the valley. The shelter deposits themselves rested upon an irregular rock ledge which, in both shelters, was encountered at an average depth of 2 ft. The deposits "feathered out" along the margins, thus establishing the limits of the occupation.

In both shelters, the basic excavation plan was to lay out 5-ft squares. The exigencies of the terrain and rock-fall features below ground somewhat modified these techniques. It is estimated that 85 per cent of the total occupied area of each shelter was excavated.

Shelter A

Occupational debris and artifacts occurred about 6 inches below the present flat surface. The cultural horizon proved to be uniform throughout, consisting of dark sandy clay with a humus content, intermingled with evidence of fire, ashes, fire-cracked rocks, etc. No apparent order could be discerned in the distribution of the cultural debris. This level was about 1 ft in thickness, and rested upon the bedrock of the shelter floor. In contrast to Shelter *B*, there was no vegetation under this overhang; the absence of roots in the deposit suggests that this condition is of some antiquity. In the following paragraphs, the finds from Shelter *A* are described and analyzed.

Ceramics.—Ceramic remains from Shelter *A* were scanty, but remarkably consistent as to type. The sample, in fact, is too small to warrant a formal ceramic analysis. Consequently the material is only briefly described here.

A total number of 14 sherds were found. Only one of these is a large rim sherd (fig. 6: 1). All sherds are thick and plain. Mean body thickness is 10.42 mm; the range is 8 to 15 mm. All sherds are grit tempered. The tempering material is crushed quartz of various colors with a particle size range from 1 to 3 mm. Some particles are rounded and sub-angular suggesting a fluvial origin. Particle density on the surfaces of the sherds is medium to high.

Coiling was the method of manufacture. The texture is medium coarse with some lamination, but the overall impression is homogeneous. Some sherds are surface eroded, probably as a result of water percolation within the soil deposit in which they were found. While no hardness measurements were taken, the general impression of the sherds is one of medium hardness. In color, the sherds are uniformly ochre-grey. The core color is generally the same, though in some cases the inner core is dark grey-black.

The exterior sherd surfaces appear smoothed. The interior surfaces seem to be only superficially smoothed. Wiping marks have been noted on both surfaces.

The single large rim is straight and slightly inturned (fig. 6: 1). There is no pronounced shoulder between the rim and the body. The lip is crudely flattened and not thickened.

The body sherds indicate round, almost "coconut-shaped" vessels of medium to large size. In the case of one fragment, a flat bottom is suggested. No appendages have been noted.

The ceramics from Shelter *A* are clearly affiliated with Adena pottery. While it is not possible, on the basis of the limited sample, to assign them to a particular pottery type, there is no doubt as to the general Adena connections of this material. This will be discussed in further detail below.

Chipped Flint.—Shelter *A* yielded 14 chipped artifacts and 94 pieces of flint debitage. Among the projectile points, three specimens, all made of local flint, are *Adena Stemmed* types. The two complete points (fig. 3: 5, 7) measure 5.5 cm and 4.8 cm in length; both specimens have a maximum thickness of 0.9 mm. The third specimen is a basal fragment. Similar points are of common occurrence at most Adena sites in the Ohio Valley.

In addition, this shelter produced two points of Adena affiliation that have recently been named *Cresap Stemmed* (Dragoo, 1964: 178). One of the Peters Cave specimens measures 7.5+ cm in length and 0.8 cm in thickness; it is made of local flint. Typologically it conforms in all respects to Dragoo's type description. It is a "... slender, lenticular cross-section blade with a tapered stem and straight base. The stem usually tapers directly from the shoulders with little or no indenta-

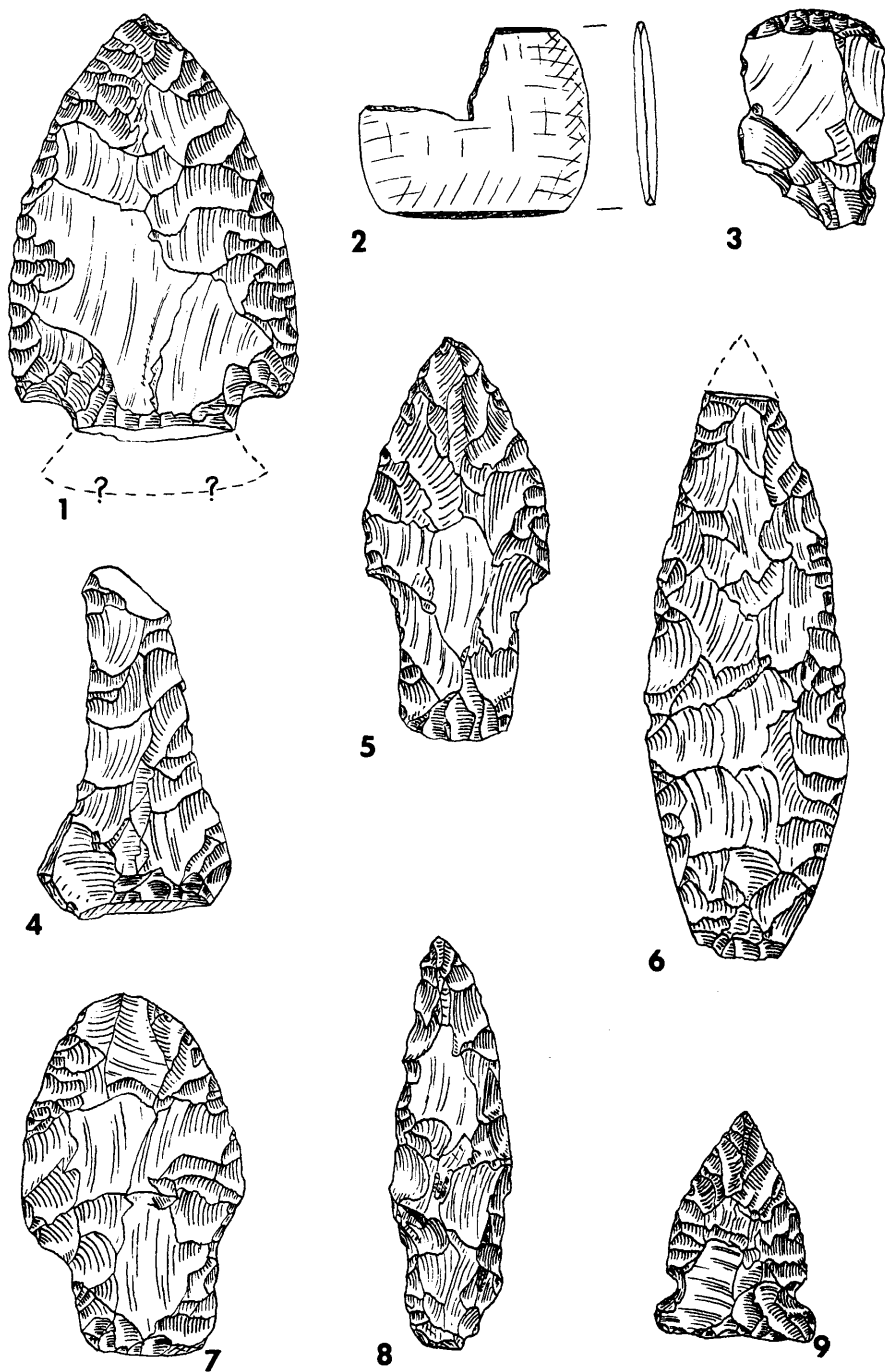


FIGURE 3. Artifacts from Shelter 4.

tion present. The chipping was carefully done by a combination of percussion and pressure" (1964: 178). The stem of this Peters Cave point was bilaterally ground (fig. 3: 6). The second specimen, again made of local flint and measuring 5.5 cm in length and 1.0 cm in thickness, is rather crude in execution. Morphologically, it does, however, correspond to the type description of the *Cresap Point* (fig. 3: 8).

The Shelter A assemblage yielded a single fragmentary *Snyders*-like point made of black Upper Mercer flint from Coshocton County, Ohio (fig. 3: 1). This specimen, which is broken at the notch, was in excess of 5.5 cm long. It is carefully made and appears to correspond in all respects to the classic Hopewellian *Snyders* type (Bell, 1958). Its occurrence here suggests a late horizon within the *Adena Phase* of the *Scioto Tradition*.

Finally, the deposit yielded a single, essentially unifacial side-notched point made of black Upper Mercer flint from Coshocton County, Ohio (fig. 3: 9). It is 3.0 cm long; its maximum width is at the base. The notches are shallow. While such points are not generally typed as Adena, Webb and Snow have noted that side-notched points "... were early recognized as Adena points. They are fairly common" (1945: 83).

The remainder of the flint artifacts consists of three entirely fragmentary projectile points which defy type identification. One of these is made of Upper

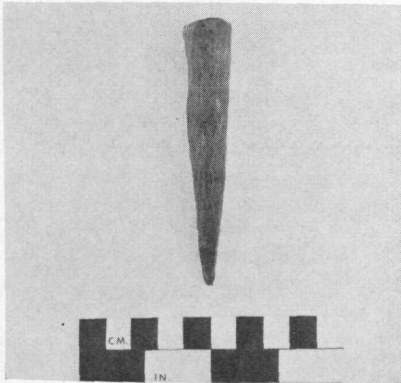


FIG. 4

FIGURE 4. Carved antler flaker from Shelter A.

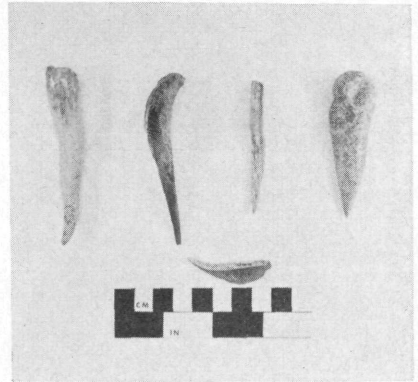


FIG. 5

FIGURE 5. Bone tools from Shelter A.

Mercer flint, the other two of some local flint variety. In addition, there is a fragmentary expanded-base drill (fig. 3: 4) and one endscraper on a flake (fig. 3: 3). Both of these specimens are made of Flint Ridge flint. Finally, the site yielded an amorphous chipped object and a spokeshave on a flake. Both are made of local flint.

The debitage can be broken down into 10 cores and core fragments and 84 chips. Only one specimen is made of Flint Ridge flint; the remainder comprise Upper Mercer material and local flint and chert varieties.

Ground Stone Artifacts.—This category includes one proximal fragment of a block-ended tube made of sandstone and a very small (length: 3.0 cm; width: 2.5 cm) ground hematite celt typical of the *Adena Phase* (fig. 3: 2). The latter specimen had been badly shattered by exposure to fire.

Bone Tools.—A total of 8 bone tools were found in Shelter A. Two of these

were made on antler tines; they seem to have been flakers (fig. 5; fig. 4: 1). They measure 9.2 and 10.2 cm respectively in length. The larger specimen (fig. 4) is of considerable interest from a technological point of view. Instead of having been ground, as is commonly the case, this specimen bears delicate cutting marks over the entire surface. At first sight, they convey the impression of having been carved on wood. To our knowledge no similar specimen has been reported in the literature.

Five awls were found at Shelter A. Two of these are splinter awls, measuring 7.0 and 8.3 cm respectively (fig. 5: 2, 3). The bones can not be identified. The third specimen is a well-ground awl made on a deer metatarsal, 7.6 cm in length (fig. 5: 4), and the remaining two specimens are fragments made on unidentifiable bones.

Finally, a split canine tooth of either dog or wolf was recovered (fig. 5: 5). This specimen was carefully ground along the split edges for an unknown purpose.

Fauna.—A total of 283 bones were found in Shelter A. Of these, 109 were identifiable and are listed below. Of the remaining 174 specimens, 14 were bird bones and 160 were mammal bones. The following is a list of the identified material supplied by Dr. Paul W. Parmalee.

Identification	Number of identified remains/minimum number of individuals
Mammals:	
Cottontail, <i>Sylvilagus floridanus</i>	19/4
Woodchuck, <i>Marmota monax</i>	15/2
White-tailed Deer, <i>Odocoileus virginianus</i>	14/1
Southern Flying Squirrel, <i>Glaucomys volans</i>	13/3
Squirrel, <i>Sciurus</i> spp.	12/2
Wood Rat, <i>Neotoma floridana</i>	7/2
Gray Squirrel, <i>Sciurus carolinensis</i>	6/1
Fox Squirrel, <i>Sciurus niger</i>	2/1
Striped Skunk, <i>Mephitis mephitis</i>	2/1
Weasel, <i>Mustela</i> cf. <i>frenata</i>	2/1
Raccoon, <i>Procyon lotor</i>	1/1
Canid, <i>Canis</i> sp.	1/1
Man (infant), <i>Homo sapiens</i>	1/1
Birds	
Passenger Pigeon, <i>Ectopistes migratorius</i>	4/2
Ruffed Grouse, <i>Bonasa umbellus</i>	1/1
Long-eared or Short-eared Owl, <i>Asio</i> sp.	1/1
Hawk: Red-tailed?, <i>Buteo jamaicensis</i>	1/1
Pied-billed Grebe, <i>Podilymbus podiceps</i>	1/1
Blue Jay, <i>Cyanocitta cristata</i>	1/1
Reptiles:	
Box Turtle, <i>Terrapene</i> sp.	5/2

This fauna will be discussed in some detail in the concluding section of this study.

Molluscs.—With the exception of some tiny fragments, all mollusc remains from Shelter A could be identified. No marine specimens were present; all gastropods were terrestrial. In his report, Dr. David H. Stansbery notes that, "All species collected still live in central and south-central Ohio today. The mussel species are not characteristic of a large river, but rather of an upper-intermediate to rather small (but not headwaters) stream." (Report to senior author, dated November 13, 1964). The following is a list of the identified mollusc remains.

Pelecypoda:

<i>Fusconaia flava f. flava</i> (Raf., 1820)	1
<i>Amblyema plicata f. costata</i> (Raf., 1820)	1
<i>Pleurobema cordatum f. coccineum</i> (Con., 1863)	1
<i>Elliptio dilatatus</i> (Raf., 1820)	5
<i>Ptychobranthus fasciolaris</i> (Raf., 1820)	2
<i>Actinonaias carinata</i> (Bar., 1823)	3
<i>Lampsilis radiata siliquoidea</i> (Bar., 1823)	3
<i>Dynomia torulosa</i> (Raf., 1820)	1 (female)

Gastropoda:

<i>Triodopsis albolabris albolabris</i> (Say, 1817)	9
<i>Triodopsis albolabris allenii</i> (Wetherby, 1883)	4
<i>Triodopsis tridentata tridentata</i> (Say, 1817)	1
<i>Mesodon thyroidus thyroidus</i> (Say, 1817)	1
<i>Anguispira kochi kochi</i> (Pfeiffer, 1845)	1
<i>Anguispira alternata alternata</i> (Say, 1817)	1
<i>Haplotrema concavum</i> (Say, 1821)	1

The pelecypod assemblage represents 17 identifiable specimens comprising 8 species and some 15 tiny additional fragments that were excluded from examination.

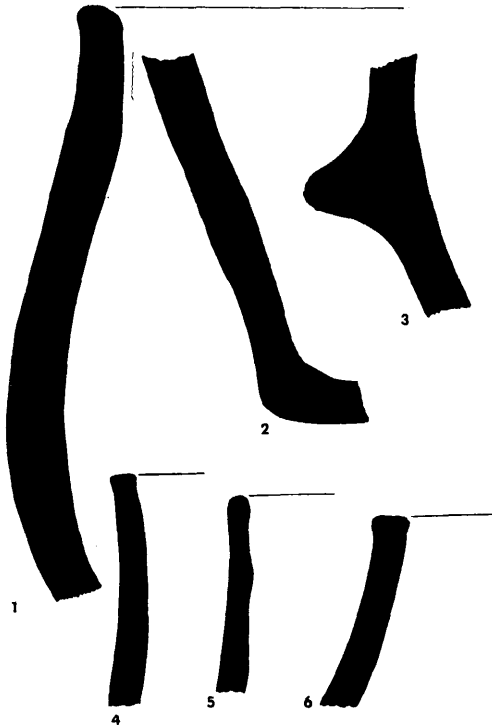


FIGURE 6. Pottery profiles from Shelters A (1) and B (2-6).

The gastropod assemblage represents 18 identifiable specimens comprising 7 species. In addition, there were a number of small fragments that were not submitted for identification. It is probably fair to assume that the gastropods are incidental to the human occupation of the site. In fact, Stansbery notes that the "... specimen of *Mesodon t. thyroidus* appears fresh enough to be a very

recent addition to the rock shelter situation," (Report to senior author, dated November 13, 1964). If so, this individual may have entered the deposit through a gopher or other rodent hole.

Conclusions.—The evidence indicates that Shelter *A* of Peters Cave was occupied during a late horizon of the *Scioto Tradition*—*Adena Phase*. The ceramics, while not entirely in line with the classic Adena types, are nonetheless sufficiently close to some of the well-known plain Adena wares to warrant their affiliation with such types as *Adena Plain* and the plain sub-type of *Fayette Thick*. That the assemblage at least in part is late is suggested by the presence of a fragmentary *Snyders*-like point. The fauna is undistinguished except for the presence of a human deciduous tooth and the passenger pigeon. Undoubtedly, the occupation here was a highly temporary character, involving very few individuals, who presumably made use of this shelter during a hunting expedition. Of interest is the use of shellfish which could only have been derived from a smaller river such as Salt Creek or Little Salt Creek.

Shelter B

The archaeological deposit in this shelter was encountered almost immediately below the surface. The soil here was a black humus littered with cultural debris, charcoal, and artifacts. This humus, at a depth of approximately 1 ft below the surface, rested upon a deep red, burnt soil which, in turn, rested upon the shelter's rock floor. This stratigraphic evidence is interpreted to indicate a natural, hardened soil layer on which a number of fires of some intensity had been placed, thus producing in places the deep red discoloration. The fire-hardened deposit, which was up to 6 inches in thickness, was encountered throughout the shelter. The deposit yielded very few artifacts or other evidence of human occupation. Horizontally, the greatest density of cultural debris was encountered in the center of the shelter. Horizontally and vertically the artifacts appeared homogeneous, suggesting a single-period occupancy of some length, which may, however, represent several temporally distinct occupations. Within the deposit it was impossible to discern any stratigraphy, largely because of intensive root and rodent disturbances. While relatively abundant charcoal was encountered, it was deemed advisable, in view of the intensive contamination factor, not to submit these samples to a laboratory for radiocarbon dating. At present, and in contrast to Shelter *A*, small trees and creepers grow around and in the shelter. The degree of root disturbance in the deposits suggests that this vegetation was even more dense in the past.

Ceramics.—The pottery from Shelter *B* consists of two types, which have been named *Peters Cordmarked* and *Peters Plain*. The samples for both types are sufficiently large to permit tentative formal type definitions.

Scioto Tradition, Peters Cordmarked (figs. 7: 14–16; 8).

General Data: New type not previously described. Present definition is based upon a total of 109 sherds, consisting of 14 rims and 89 body sherds.

Paste:

Method of Manufacture: Probably coiled.

Temper: Mixed coarse temper consisting of angular fragments or small split pebbles of chert and diverse rocks. Flint and chert chippage is common. Density of temper particles is high, and the particle dimensions are up to and in excess of 1.0 cm in diameter, although usually somewhat smaller.

Texture: Brittle, coarse, and very crumbly, even after drying. Lamination occurs.

Hardness:	No hardness measurements were taken because of the unreliability of this measure and because it is of no particular utility in the differentiation of pottery types (Phillips, Ford, and Griffin, 1951: 70). Impressionistically, this pottery is rather soft.
Color:	Surface color ranges from orange-buff to medium dark grey. Lighter shades predominate. Core color ranges from grey to buff.
Surface Treatment:	Cordmarking covers the entire body in every case up to the lip. Cordmarking is always vertical. Two kinds of cordmarking can be distinguished: impressions that are entirely unsmoothed, and coarse markings that are slightly smoothed. The former is invariably densely spaced and fine, the latter broadly spaced and wide. Inner surfaces are roughly smoothed, often showing striations.
Form:	
Rim:	Rims are straight, occasionally marked with deep punctates approximately 1.0 cm below the lip, causing interior bosses. They are 0.5 cm in diameter, roughly rectangular, and they seem to have been applied with a pointed stick.
Lip:	Lips are flattened. In the present sample, three bear diagonal and smoothed cord impressions. Two sherds have slight lip notching. One rim has a rounded lip, and one is slightly thickened exteriorally.
Body:	No definite data; probably round or ovoid pots.
Thickness:	<i>Body sherds</i> : the metric information was derived from the total sample. Mean thickness proved to be 6.1 mm, with a range from 2 to 10 mm. <i>Rim sherds</i> : the total sample was measured. Mean thickness proved to be 5.1 mm, with a range from 3 to 7 mm.
Base:	None.
Appendages:	None.
Geographical Range:	<i>Peters Cordmarked</i> seems to occur throughout southern Ohio as well as in the central and east-central parts of the state. In the absence of formal analyses, no definite statements can as yet be made on the distributional range. Still, the authors have seen numerous sherds from various parts of the state which seem to be very similar to <i>Peters Cordmarked</i> . Invariably they occur in a post-Hopewell context. This will be discussed below.
Chronological Position:	Clearly, <i>Peters Cordmarked</i> post-dates the <i>Hopewellian Phase</i> of the <i>Scioto Tradition</i> . On the other hand, this pottery type is obviously related to <i>McGraw Cordmarked</i> of that phase. We consider it a lineal descendent of that type.
Probable Relationships:	This will be discussed below.

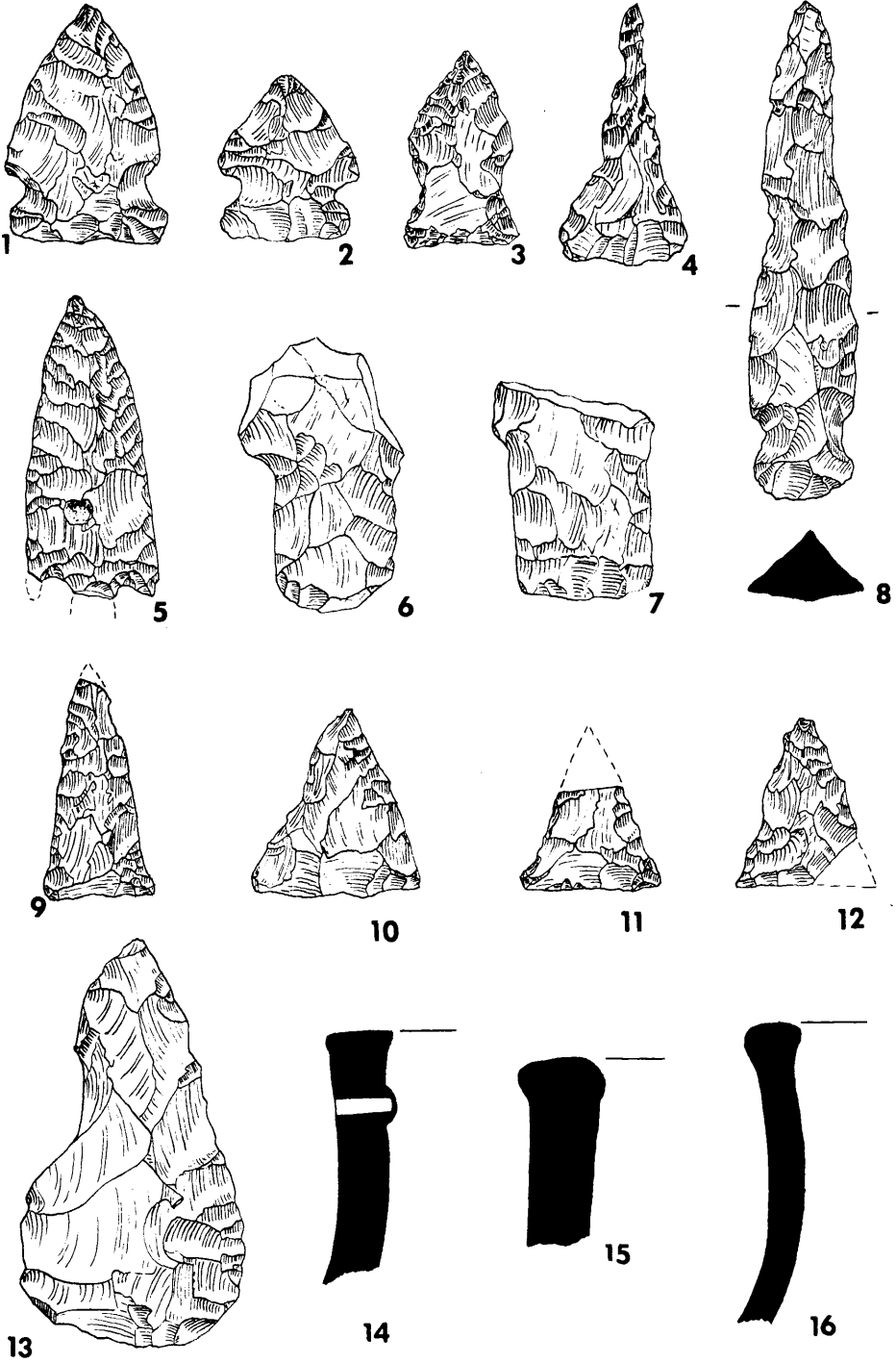


FIGURE 7. Artifacts from Shelter B.

Scioto Tradition, Peters Plain (fig. 6: 2-6).

General Data:	New type not previously described. Present definition is based upon a total of 118 sherds, consisting of 10 rims and 108 body sherds.
Paste:	
Method of Manufacture:	Coiled.
Temper:	Same as <i>Peters Cordmarked</i> .
Texture:	Same as <i>Peters Cordmarked</i> . Many sherds show signs of erosion on their surfaces.
Hardness:	No measurements were taken (see under <i>Peters Cordmarked</i>). Generally the same as <i>Peters Cordmarked</i> .
Color:	Same as <i>Peters Cordmarked</i> .
Surface Treatment:	Roughly smoothed on both exterior and interior surfaces. Wiping marks are present in some cases.
Form:	
Rim:	Rims are straight and vertical.
Lip:	Lips are flattened or rounded and unthickened.
Body:	Thickness and size of several sherds imply large rounded vessels.
Thickness:	<i>Body sherds</i> : the metric data were derived from the total sample. Mean thickness proved to be 6.3 mm, with a range from 4 to 10 mm. <i>Rim sherds</i> : the total sample was measured. Mean thickness proved to be 6.1 mm, with a range from 5 to 8 mm.
Base:	On the basis of three sherds, bottoms are believed to have been flat, meeting the body wall at slightly obtuse angles.
Appendages:	One sherd has a conical lug, 2.0 cm. long, on the shoulder of the body.
Geographical Range:	Same as <i>Peters Cordmarked</i> .
Chronological Position:	Same as <i>Peters Cordmarked</i> .
Probable Relationships:	This will be discussed below.

In addition, Shelter *B* yielded a single grit-tempered, buff-colored sherd, exteriorally covered with net impressions. The temper is somewhat finer than in the types thus far described (fig. 8: center). Finally, there were 8 undefinable sherds, consisting of longitudinally split body fragments.

The ceramics from Shelter *B* are clearly of Woodland affiliation. Of the two types defined, the authors prefer to consider *Peters Cordmarked* to be descendent, rather than a contemporary variant, of *McGraw Cordmarked*, which is so common at most Hopewellian sites in Ohio (Prufer and McKenzie, 1965). According to this interpretation, certain modifications have taken place. The cordmarking style on *Peters Cordmarked* differs from that of its predecessor in that the cording appears to be tighter on those sherds with unsmoothed surfaces and somewhat coarser on the smoothed specimens which, moreover, seem somewhat thicker than the former. The rim configuration of *Peters Cordmarked* shows straighter rims, as well as the occasional use of rectangular punctations below the lip. These features have not been noted in the *McGraw Cordmarked* type. On the other hand, the overall impression of *Peters Cordmarked* is one of close similarity to *McGraw Cordmarked*. The modifications appear to be entirely in line with what might be expected in a series of related ceramics that show a temporal distance of perhaps two centuries.

If we look for external relationships of *Peters Cordmarked* it should first be noted that closely related types are not uncommon in Ohio, though they have never been adequately published. Thus, at the Lichliter Site in Montgomery County, Ohio, a demonstrable Late Woodland site with very similar pottery was found (Allman, 1957). A radiocarbon date here gave a value of 350 ± 250 A.D. (M-537). The comment on this date states that the "... date supplied by this sample ... may be somewhat early" (Crane and Griffin, 1959: 182). Again, related types seem to have been found (but not published) at the Turpin Site near Cincinnati, in Hamilton County, Ohio, and at a variety of locations in central Ohio. The senior author has cursorily examined some of the Turpin material in the Peabody Museum of Harvard University, and both of us have noted strong similarities in a ceramic series from a rockshelter in Coshocton County, Ohio. Finally, the Salt Creek Site in Ross County, discovered in the course of our 1964 survey, yielded ceramics which are virtually identical with those of Peters Cave. All of

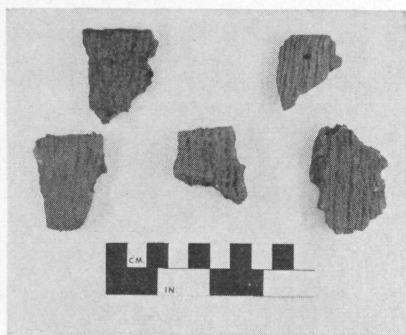


FIG. 8

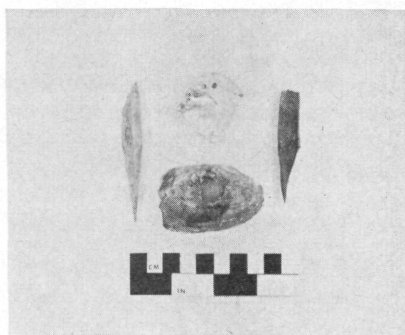


FIG. 9

FIGURE 8. Pottery from Shelter B.

FIGURE 9. Bone and shell artifacts from Shelter B.

these sites clearly belong into the Late Woodland period; they all predate the appearance of Fort Ancient, though there was a stratigraphically distinct Fort Ancient component at the Turpin Site (Oehler, 1950).

In the published and unpublished materials from sites in the Upper Ohio Valley, are found a series of types which seem to us closely related to *Peters Cordmarked*. Most notable among these wares are *Watson Cordmarked* and *Mahoning Cordmarked*, named after the Watson Site (46Hk34), in Hancock County, West Virginia, and after the Mahoning Valley in Ohio (Dragoo, 1956). The temporal position of the Watson Site has been defined as Middle Woodland, but a radiocarbon date for this site gave a value of 500 ± 100 A.D. (C.P.-43). The Middle Woodland definition here was based upon the occurrence of numerous Hopewell bladelets, though no other items betray the presence of the *Hopewellian Phase* of the *Scioto Tradition* in this assemblage. Finally, Dr. Edward V. McMichael, State Archaeologist of West Virginia, kindly sent us samples of his Armstrong and Buck Garden ceramics, which would appear to be related to *Peters Cordmarked*.

We believe that the presence in the *Watson Cordmarked* type of certain sherds strongly reminiscent of *McGraw Cordmarked*, as well as the absence in the deposit of triangular points similar to those in Peters Cave, Shelter B, and at the Salt Creek Site, would place the Watson Site somewhere between the Late Hopewellian occupation at McGraw and the early Late Woodland occupation at the two Ohio

sites just mentioned. Certainly the Watson Site, with a total of 3103 excavated sherds, has yielded no ceramics of the Hopewellian series. The dating hypothesis here put forth agrees with the radiocarbon date. The fact that *Watson Cordmarked* is a limestone-tempered type (*Mahoning Cordmarked* is grit tempered) does not particularly disturb us, since in Ohio, at least, a recent ceramic analysis of numerous Woodland collections has shown no significant distributions of the two tempering materials (Prufer, n.d.).

Peters Plain presents an interesting problem. Were it not for the context, this type could easily be mistaken for one of the several common plain wares affiliated with the *Adena Phase*. As it happens, the same kind of pottery occurs at many Ohio Hopewellian sites, apparently decreasing quantitatively through time. It was found in what we consider to be an unquestionable context at the McGraw Site (Prufer and McKenzie, 1965). Thus, it seems clear that this type of pottery underwent very little change throughout the period of its tenure in Ohio, which ranges from Early Woodland into Late Woodland. Certainly, whatever changes can be detected in rim configuration, thickness, etc., are at present difficult to assess, because of inadequate samples. On the other hand, it is equally clear that the changes within the cordmarked wares of the *Scioto Tradition* were more evident through time during the overall Woodland period than those in the plain wares.

We have elsewhere (Prufer and McKenzie, 1965) suggested that the ancestors of the Middle Woodland wares of the *Scioto Tradition* may be sought for in the ceramics from certain Adena sites, notably in such types as *Johnson Plain* and *Levissa Cordmarked*, and in a less obvious sense in the two variants of *Fayette Thick*; to this list may be added *Adena Plain*. Nothing in this presentation would obviate that assumption. Our only problem is—and remains—the precise date of the Kentucky type sites for a number of these ceramics, notably the C & O Mounds (Webb, 1942).

In this discussion, the evidence from the Salt Creek Site, at the confluence of the Scioto River and Salt Creek, is of relevance. This locality represents a large village, located circa 3 miles from Peters Cave. Here we found, during the 1964 survey, very large quantities of projectile points and pottery. It is our impression that this is a single-component site, since none of the artifacts in this assemblage appear to be out of line with such a proposition.

The pottery consists of plain and cordmarked sherds. While their range appears to be wider than that from Peters Cave, they nonetheless comprise, in a significant way, most of the types and their diverse attributes found at Peters Cave, Shelter B. Both forms of cordmarking noted at Peters Cave are present; rim profiles from both sites are similar, and the temper is nearly identical. Among the cordmarked sherds, thickness measurements are nearly identical. Only in the plain ceramics are there some minor differences; the sherds from Peters Cave are somewhat thicker than those from the Salt Creek Site, but not substantially so. At Peters Cave, Shelter B, as well as at the Salt Creek Site, the grit temper has a marked admixture of tiny flint chips.

To this comparative ceramic profile, one might add that the substantial series of triangular projectile points from the Salt Creek Site, in addition to some new forms, duplicates all specimens from Peters B Cave. This similarity between the two assemblages even holds true for the stemmed points.

Salt Creek will be investigated in more detail in the near future. Nevertheless, albeit with reservations, we are willing to state that this locality must be nearly contemporaneous with the occupation of the Peters Cave, Shelter B.

Chipped Flint.—Shelter B yielded 34 chipped artifacts and 304 pieces of flint debitage. Among the projectile points, four specimens are small triangular types; two of these are made of Upper Mercer flint from Coshocton County,

Ohio, the others are made of some local flint material. The following are the basic dimensions of these points:

<i>length</i>	<i>width</i>
2.6 cm	2.4 cm
2.3 cm	base broken
tip broken	1.9 cm
3.0 cm	1.6 cm

In all cases the maximum width is at the base. All specimens have a maximum thickness of 0.4 cm. In general, these points, as well as the comparative specimens from the Salt Creek Site, are very similar to Mississippian-type points. Tentatively, the only distinction appears to be that the Late Woodland specimens tend to be somewhat broader than Mississippian types; this, however, requires verification (fig. 7: 9-12).

The deposits produced six side-notched points. Five of these are made of Upper Mercer flint, the sixth of some local material. The following are the basic dimensions of these points:

<i>length</i>	<i>width</i>	<i>thickness</i>
2.7 cm	1.6 cm	0.3 cm (unifacial)
3.3 cm	2.2 cm	0.7 cm
2.3 cm	2.0 cm	0.7 cm
2.3 cm	1.8 cm	0.8 cm
tip broken	3.0 cm	0.7 cm

The sixth specimen is too fragmentary to permit meaningful measurements. In all points, the blades tend to be short and triangular. The side-notches range from shallow to medium-deep. Generally the maximum width is at the base, which is straight. These points are markedly thick and stubby, except for the unifacially flaked specimen. In execution, they are rather crude. No particular cross-section could be determined; this is probably a function of the crude workmanship (fig. 7: 1-3).

Shelter *B* yielded five so-called 'fish-spears'. While these points have been recognized repeatedly as Late Woodland points (Converse, 1963: 116), it should be noted that a morphologically related type appears to occur in the Archaic. Here, as in the case of many other projectile points, identification is largely a matter of context. A recent definition of this point reads as follows: "The flaking technique used . . . is a departure from the predominate [sic] style of the later types. It is characterized by a narrow and heavy appearance, with large and short pressure flakes which give it a decidedly diamond-shaped or rounded cross-section. Shoulders, for the most part, are seldom pronounced because of the long shallow side notches. Most examples have a straight or slightly concave base, which is occasionally ground or polished. One variety of this type is wider, thinner, and has more percussion flaking . . . Sizes are between 1 inch and 2.5 inches and most are about 2 inches long" (Converse, 1963: 116). The following are the basic dimensions of these points:

<i>length</i>	<i>width</i>	<i>thickness</i>
6.8 cm	1.6 cm	0.9 cm
4.8 cm	2.2 cm	1.1 cm
5.2 cm +	2.3 cm	0.9 cm

The remaining two specimens are too fragmentary to permit measurements. Two points are made of Upper Mercer flint, the remainder of local material (fig. 7: 8).

Two heavy-stemmed points were found in the Shelter *B* deposits. Both are basal fragments. One specimen is made of Flint Ridge flint from Licking County,

Ohio, the other of Upper Mercer flint. The only meaningful measurements that could be taken on these fragments are on the stem. They are as follows:

<i>length</i>	<i>width</i>	<i>thickness</i>
2.1 cm	2.0 cm	0.8 cm
1.9 cm	1.7 cm	0.8 cm

The stems are uniform in thickness. Superficially, these basal fragments resemble *Adena Stemmed* points, but the execution is cruder and the proportions of stem to blade would appear to be different from those of the *Adena* type; *Adena Stemmed* points seem to be broader. Similar stemmed points have been noted from certain late sites in Ohio, such as Mixer in Huron County (material in the Case collection) and the Salt Creek Site in Ross County. Related forms occur at the Watson Site in Hancock County, West Virginia (Dragoo, 1956, Pl. 8, row 6) (fig. 7: 6, 7).

In addition, Shelter *B* yielded five fragmentary projectile points. Two of these are made of Flint Ridge flint, two of Upper Mercer flint, and one of Nellie Chert, which is a component of the Upper Mercer flint series. Two of these fragments may represent a corner-notched and a side-notched point respectively. Both appear to have been well-made, narrow, long points.

Finally, the Shelter *B* assemblage yielded one expanded-base drill, 3.6 cm in length, and made of local flint (fig. 7: 4), one small cache blade, 5.7 cm in length and made of local flint (fig. 7: 13), and one bifacially flaked 'ovate knife', 4.7 cm long and made of Upper Mercer flint.

The debitage can be broken down into 19 cores and core fragments and 285 chips. The cores are uniformly amorphous. With the exception of a single chip of Flint Ridge flint, all other specimens are made of Upper Mercer flint and local raw materials. In addition, nine worked flakes and core fragments were found; five of these are made of Upper Mercer flint, and four of some local material.

This flint assemblage is clearly referable to a Late Woodland horizon. At least three types of points found in Shelter *B* have also been noted at other Late Woodland sites. Of great interest is the occurrence of small triangular points. While perhaps not entirely identical with Mississippian points, they are sufficiently similar to permit their classification with such types. Their occurrence in what is interpreted as a pre-Mississippian context suggests that triangular points pre-date the Mississippian horizon in this area. This observation finds additional support from the Salt Creek Site in Ross County, Ohio. Here, ceramics very similar to those from Shelter *B* were found in association with numerous triangular points identical to those from the cave site, and there is no evidence for a Mississippian component.

It is of interest that only one chip and two projectile points from Shelter *B* are made of Flint Ridge flint. In general this observation is true of the Salt Creek Site assemblage as well. The use of Flint Ridge material appears to have been uncommon in Late Woodland times. This is in sharp contrast to the preceding *Hopewellian* and *Adena* Phases of the *Scioto Tradition*. Converse (1963: 116) also notes this for other points that are demonstrably Late Woodland. This shift in raw material preference after the decline of Hopewell appears to be of some importance.

Finally, the similarity of the two heavy-stemmed points from Shelter *B* and comparable points from other late sites to *Adena Stemmed* projectile points should be noted. Such single-component sites of the Middle Woodland *Hopewellian* Phase as McGraw have also yielded a few points that are related to, or identical with, *Adena Stemmed* points (Pi-Sunyer, 1965). Taken in conjunction with the viability of the plain ceramics throughout the span of the Woodland Period and the equal viability of many cordmarked wares during the same span, these points afford interesting evidence for the persistence through time of many *Scioto Tradition* elements. This stands in sharp contrast to the ephemeral nature of many,

if not all, classic Hopewell elements, which neither grow out of the preceding *Adena Phase* nor survive into the *Peters Phase* after the Hopewellian decline. In Ohio, cultural continuity apparently ran through the local *Scioto Tradition* and not through the extraneous Hopewellian ceremonial system, which merely constituted a cultural overlay of the *Scioto Tradition* during a specific period in time (Prufer, 1964, 1965).

Bone and Shell Artifacts.—A total of 13 bone tools were recovered from Shelter B. They are quite undistinctive. There are four antler tines that have been worked. One of these clearly is a 'flaker'; the others are tip fragments. In addition there are two complete small splinter awls (fig. 9), five awl fragments, one small spatulate object made on a bone splinter, and one flat, ground and roughly pointed bone fragment. Except for the antler objects, none of the bones could be identified, though bird bones seem to be absent.

All four shell artifacts are made of fresh-water shells. One of these is a small shell pendant, cut into a rough rectangle and provided with two perforations near one edge. In addition, there are one so-called shell 'hoe' and two cut fragments of shell (fig. 9).

Varia.—As part of the prehistoric assemblage, there should also be listed one small flat sandstone slab which is highly polished on one surface, a small cup-stone made of sandstone, and a charred fragment of a black walnut shell. The cup-stone has one 'cup' on each face, and both faces bear traces of what appears to have been red pigment.

Finally, the surface zone produced a lead musket ball. For those interested in historic archaeology, a brief description of this artifact may here be given. The ball has a small median ridge and its diameter is 1.1 cm. It is somewhat flattened, apparently because of impact. Also found just below the surface were a few .22 shells and a broken gin bottle.

Fauna.—A total of 393 bones were found in Shelter B. Of these, 76 were identifiable and are listed below. Of the remaining 317 specimens, 295 were mammal bones and 22 were bird bones. The following is a list of the identified material.

Identification	Number of identified remains/minimum number of individuals
Mammals:	
White-tailed deer, <i>Odocoileus virginianus</i>	30/3
Woodchuck, <i>Marmota monax</i>	10/3
Squirrel (probably gray), <i>Sciurus carolinensis</i>	6/1
Cottontail, <i>Sylvilagus floridanus</i>	4/1
Gray Fox, <i>Urocyon cinereoargenteus</i>	4/1
Wood Rat, <i>Neotoma floridana</i>	3/1
Striped Skunk, <i>Mephitis mephitis</i>	2/1
Raccoon, <i>Procyon lotor</i>	2/1
Opossum, <i>Didelphis marsupialis</i>	1/1
Southern Flying Squirrel, <i>Glaucomys volans</i>	1/1
Birds:	
Turkey, <i>Meleagris gallopavo</i>	2/1
Passenger Pigeon, <i>Ectopistes migratorius</i>	1/1
Reptiles:	
Box Turtle, <i>Terrapene</i> sp.	6/1
Turtle sp.	3/1
Turtle: <i>Pseudemys</i> , <i>Chrysemis</i> group	1/1

Dr. Paul W. Parmalee, who identified the fauna, offers the following comments on this faunal assemblage: "Judging from tooth wear, I would age the one deer

in your collection somewhere between 7½ and 8½ years. In the case of the wood-chuck femur, the neck of the head had been cut and it is evident this was probably done in an attempt to sever the thigh from the pelvis," (Report to senior author, dated October 7, 1964).

Molluscs.—With the exception of a number of small shell fragments, all specimens could be identified. It is of interest that, in contrast to Shelter *A*, the molluscan fauna of Shelter *B* yielded no gastropods other than a very few tiny fragments. The following is a list of the identified molluscs.

Pelecypoda:

<i>Amblema plicata</i> (Say, 1817)	7
<i>Elliptio dilatatus</i> (Raf., 1820)	11
<i>Lasmigona costata</i> (Raf., 1820)	1
<i>Ptychobranhus fasciolaris</i> (Raf., 1820)	7
<i>Actiononaias carinata</i> (Bar., 1823)	2
<i>Ligumia recta</i> (Lam., 1819)	1
<i>Lampsilis radiata siliquioidea</i> (Bar., 1823)	10
<i>Lampsilis ovata</i> f. <i>ovata</i> (Say, 1817)	3
<i>Lampsilis fasciola</i> (Raf., 1820.j)	1
<i>Dysnomia torulosa</i> f. <i>rangiana</i> (Lea, 1839)	2

The assemblage represents 45 identifiable specimens comprising 10 species. These molluscs could have been collected at the Scioto River, the Salt Creek, or the Little Salt Creek. In his report, Dr. David H. Stansbery points out the absence of marine specimens, and adds that no strictly headwater or large-river species were present among the pelecypods. He adds: "If all specimens came originally from the same stream site, it was most probably from a riffle or shallow run site on a stream of intermediate size. Only such a habitat could explain the combination of *Lampsilis o. f. ovata* and *Dysnomia t. rangiana*. Since streams of several sizes are in the vicinity, it seems more probable to me that the material examined had its origin in two or more streams. All species can be collected live somewhere in central or south central Ohio today," (Report to senior author dated November 13, 1964).

Conclusions.—The cultural remains of Shelter *B* are believed to belong into a single period which we have named the *Peters Phase** of the *Scioto Tradition*. In broad terms, this phase is part of the Late Woodland period prior to the appearance of the Mississippian Fort Ancient Aspect. The ceramics clearly indicate a hold-over from the Scioto Series pottery of the *Hopewellian Phase* (Prufer and McKenzie, 1965). In this connection, it should be noted that, within the two ceramic types identified, the cordmarked sherds, while clearly related to *McGraw Cordmarked*, show greater modification from the earlier type than the plain sherds, which are very similar to *McGraw Plain* and, by implication, to the plain ceramics of the *Scioto Tradition—Adena Phase*. This means that plain pottery in the Ohio area was much more impervious to change than cordmarked ware. In fact, were it not for the context, the plain pottery from Peters Cave, Shelter *B*, the ceramics from many Hopewellian sites, and the pottery from Adena deposits would be virtually indistinguishable.

Projectile points have undergone significant changes. No *Snyders*-like points were found; a series of well-known Late Woodland projectile types occurs and, most significantly, triangular points bearing considerable resemblance to later

*After completion of this manuscript, the authors had an opportunity to acquaint themselves with Late Woodland material from Ohio recently analyzed by Raymond S. Baby and Martha Potter of the Ohio State Museum. Clearly these materials are closely related to the finds from *Peters Cave B*. Spatially they were found in two discrete areas, Franklin County and the Miami drainage. Baby and Potter have defined these units and synthesized them into a *Cole Horizon* (Baby and Potter, 1965). Inasmuch as *Peters Cave B* is closely related to these materials, though probably somewhat earlier, and clearly in a different region, the *Peters Phase* should be conceived of as a unit of the *Cole Horizon*.

Mississippian points now make their appearance. The survival of some Adena-like stemmed points onto this time horizon is also of considerable interest.

The fauna, again, is undistinguished except for the passenger pigeon. It is our interpretation that this shelter, similar to Shelter A, served as a temporary hunting camp for Late Woodland Indians during a period shortly after the collapse of Hopewell and definitely before the arrival of the Fort Ancient Aspect.

DISCUSSION

In the past, a few rockshelters have been excavated in Ohio, but their archaeological content has in no sense been adequately reported (Mills, 1912; Shetrone, 1928). The excavations at Peters Cave constitute one of the first systematic operations of its kind. If these excavations are therefore of intrinsic interest because they represent a 'first,' it should also be noted that the archaeological remains recovered from the two component shelters are of great interest in their own right.

Shelter A yielded a clear-cut, single-component Adena occupation. This apparently represents the remains of a very temporary hunting expedition on a late Adena time horizon. Ecologically, it is of interest to observe the kinds of animals that were here dismembered. After elimination of such creatures as the skunk and the weasel, etc., which obviously arrived in the shelter under their own power, there remains a curious assemblage that seems to indicate a specific emphasis upon certain animal forms. We need not concern ourselves here with the presence of the white-tailed deer and the cottontail, which are more or less ubiquitous in Woodland deposits. The presence, however, of four species of squirrel, totalling at least seven individuals, suggests a specific tendency toward squirrel hunting. Next in importance appear to have been birds, among which the presence of two passenger pigeons—usually rare in Ohio archaeological deposits—should be noted. This also applies, at least in this hilly country, the the pied-billed grebe. Parenthetically, it might be mentioned that this bird is at present rare in Ohio, except during migrations (Dawson, 1903: 631-34; Chapman, 1937: 146). Somewhat surprising is the presence of the hawk, the bluejay, and the owl. At present the latter is rather uncommon in Ohio (Dawson, 1903: 374-77). We do not consider it likely that any of these birds were taken for food purposes. It seems equally unlikely that they are intrusive in the archaeological horizon. We suggest, with all due caution, that they may have been hunted for their plumage.

Both shelters yielded fair quantities of river molluscs. Obviously these must have been transported into the cave from outside of the immediate vicinity. Their sources could either have been the Scioto River and/or one of the two Salt Creeks. The presence of these molluscs seems to indicate that this source of food was carried around by travelling Indians. While the nature of this nutriment clearly forbids lengthy storage, its presence in the cave deposits affords evidence for the predilection of the *Scioto Tradition* peoples for shellfish even beyond the immediate locale of their occurrence.

A problem relates to the disposal of waste. The archaeological deposits of both shelters yielded a surprisingly fragmentary fauna. Single bones of animals are the rule. The question arises as to what happened to the remaining material. Spot testing near the cave walls provided no evidence that waste was dumped into cave recesses. Our own experience as modern quasi-occupants of the cave was that we adopted a policy of dumping our own food waste and refuse over the ledge of the shelters, down the steep slopes, into the valley. The reason for this was that exposed food, let alone rotting meat, almost immediately attracted myriads of insects, which were the more unpleasant because of the relatively constricted surroundings of the shelters, and because the majority were hornets and wasps. As far as the archaeological evidence is concerned, we therefore suggest that much of the refuse so conspicuously missing from the deposits was probably dumped summarily 'overboard'. As far as interpretation goes, this kind

of situation might of course lead to a distorted picture of the ecological situation, and our comments on ecology must be considered in this light.

In the absence of radiocarbon dates for Shelter *A*, but based upon the archaeological evidence, we would tentatively date the occupation here from approximately 50 B.C.

The density of archaeological remains in Shelter *A* suggests a very brief occupancy. In fact, the shelter may only have been occupied once. We consider it likely that the hunting party that stopped here might have been a family group. This is based upon the find of one deciduous human tooth among the bone material, which would suggest the presence of an infant. In addition, the size of the shelter, which makes it unlikely that a group larger than that of a family was here at any one time, and the scantiness of the archaeological remains, even after taking into consideration the dumping factor, would indicate an occupancy of no more than perhaps eight individuals.

At Shelter *B* the situation was somewhat different. In the first place, the occupation here clearly dates from Late Woodland times. Furthermore, the shelter was more extensive, permitting a larger occupation. It should also be noted that a comparison of the stratigraphy in the two adjacent shelters indicates that, after the Adena occupation in Shelter *A*, a soil zone was able to accumulate to a depth of about 6 inches. At Shelter *B*, on the other hand, no such accumulation was encountered; here the artifacts began to occur immediately beneath a very thin zone of humus, which at no place was more than two inches in thickness.

The cultural affiliations of Shelter *B* have been discussed in a previous section of this report. Suffice it to say here that it belongs into the *Scioto Tradition*—*Peters Phase* which it defines.

The ecological situation at Shelter *B* was somewhat different from that in Shelter *A*. Again, after the elimination of obviously intrusive forms, we are left with the white-tailed deer, represented by at least three specimens, as the dominant food animal. All other forms, with the possible exception of the woodchuck, whose intrusiveness could only be demonstrated in one out of three specimens, are represented by single animals. The only other noteworthy animal is the passenger pigeon. As has been noted before, the fragmentary nature of the fauna suggests to us that much of the refuse was dumped down the slope outside the shelter. The comments made on the molluscs of Shelter *A* here apply as well.

It cannot be ascertained with certainty whether Shelter *B* represents a single occupancy, though it seems clear that the cultural remains belong into a single phase. It is entirely possible that the archaeological remains at Shelter *B* are the evidence of repeated short occupations of hunters during the *Peters Phase*. The extent of the shelter would suggest that the maximum number of people that could comfortably have stayed here did not exceed 15 individuals.

Again, in the absence of suitable materials for radiocarbon dating, the absolute date for the *Peters Phase*, as represented at this shelter, has to be guessed at from the archaeological record. We suggest that this date should be somewhere in the neighborhood of A.D. 800.

Finally, a comment is in order on the season of the year in which these shelters were occupied. The fact that they face roughly northwest suggests that they were unsuitable for winter occupation. The nature of the fauna, particularly the squirrels and migratory birds, implies that both shelters were hunting camps frequented somewhere between May and October.

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